PRODUCT No.23800

ASAHI PENTAX MX

SERVICE MANUAL

Disassembly procedure

1. Peel off Body coverings (A19 & A20)

2. Remove Bottom cover (A400), Connector seat (A34) and Tripod screw (All).
   CSS 1.7 x 2.2 x 3, CSM 1.7 x 3.5 x 2

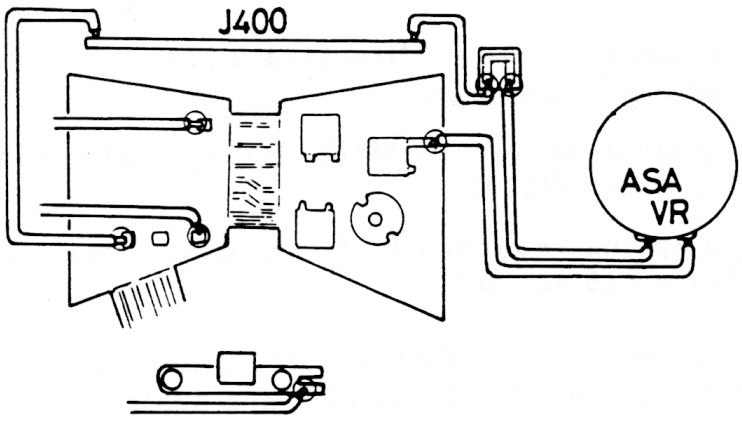
3. Remove Top cover (A300)
   a.) Retainer screw (Left handed)
   Winding lever assembly (C300)
   Cover ring B (A329)

   b.) Shutter dial— ASA100, 1/1000
   Shutter dial screw (E231) — 23800K-E321A
   Shutter dial assembly (0-E223), Hook pin (E228)
   Speed dial assembly (0-E229)

   c.) Knob assembly (0-D1)
   Nut (D12)—23110-D16-1-A
   Cover ring (D7)

   • d.) Top cover retainer screw (A15 x 2)
   CSS 1.7 x 2.2 x 2
   Top cover assembly (A300)

4. Unsolder 7 lead wires



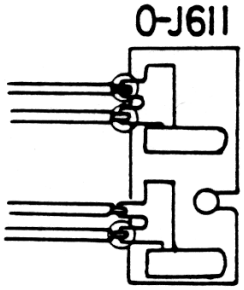
5. Front board plate assembly (A100)
   — Not necessary to cock self-timer.
   Cover (A24)
   0.1mm washers are underneath the Front board plate.

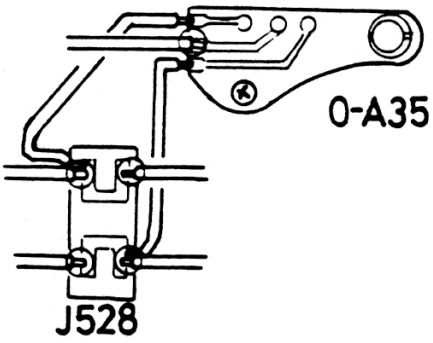
6. Sv resistor assembly (J300)— Retainer screws (E208 x 2)

7. Hot shoe contact (3204) — Hot shoe contact screw (3209 x 2)

8. P.C.board retainer plate (J205) — P.C.board retainer screw (J208), Spring (J206)

9. P.C.board assembly (J500) — CNM 1.7 x 2.5 x 2
   Base plate screw (A41-01)
10. Unsolder lead wires. 8 pcs





11. Mirror housing complete assembly (B000)
    a.) After loosening Screw (M75), disconnect Idle gear assembly (0-M74) and Supporter plate assembly (0-M53).
    b.) Remove Mirror housing complete assembly (B000) together with Prism seat assembly (0-M1), Penta prism assembly (0-L3) and Cell frame (J201).

12. Terminal contact assembly (0-J611) — CNS 1.7 x 2.5

13. Battery seat assembly (0-A8) — CNS 1.7 x 2.5 x 2

14. Restitution spring assembly (0-M62)
    a.) Idle gear assembly (0-M74), Idle gear supporter plate (M73)
    Screw (M75)

    b.) Remove Bobbin (M85) — CNL-B 1.4 x 2.0
    Without turning brass gear.

    c.) Adjusting plate assembly (0-M68), Pulley seat assembly (0-M76)
    Left handed screw (M72)

    d.) Restitution spring.assembly (0-M62), Hinge retainer spring (A5)
    — CNM 1.7 x 2.5 x 2, W3

15. Governor actuator plate (C252) — Screw (C253), CNL-E 1.7 x 2.5
    After removing (C252), install CNL-E 1.7 x 2.5 again.

16. Slow governor assembly (C100) at 1/125 shutter speed.
    — CNM 1.4 x 2.0, CNM 1.7 x 2.0

17. Governor restitution plate (E407), (E408), (E409), W3

18. Slow speed cam assembly (0-E402), Nut (E406) — 23800K-E406-A

    Caution:
    a.) Remove Nut (E406) grabbing slow speed cam shaft (E401) with plier, without turning (E401).

    b.) Remove (0-E402) by loosening two set screw, at 1 sec shutter speed.

19. Pinion coupler gear assembly (0-C249) — CNL-E 1.7 x 2.5

20. Pinion coupler lever assembly (0-C254), (C257) (C 137)

21. Coupler lever spring (C266).Coupler lever spring hook screw (C214), Cord holder (J525).

22. Coupler lever assembly (0-C244), Coupler lever retainer screw (C248) — left handed.

23. Installing seat assembly (0-A508) — CSS 1.7 x 2.2 x 2

24. SW plate assembly (0-J521) — CNL-D 1.7 x 3.5

25. Bulb coupler lever spring (C263)

26. Install Winding lever assembly (C300) with Retainer screw (C305) temporarily, and cock the shutter.

27. Shutter seat plate assembly (E200) — CSS 1.7 x 3.0 x 3
    High speed cam assembly (E210)
    Selector gear collar (E123)

28. Slow speed cam shaft (E401)
    LW 17, W70

29. Winding seat assembly (C100) — Nut B (E144).CNM 1.7 x 3.0, CSS 1.7 x 2.5

30. Release plate assembly (0-A502) — CNL-D 1.4 x 2.0
    Shutter actuator plate A assembly (0-A504)

31. Shutter rod spring (A514)

    Shutter rod assembly (0-A501)

32. Self-timer (H100) — CNM 2.0 x 9.0, CNM 1.7 x 3.0

33. X contact seat assembly (0-J621) — CNS 1.7 x 2.5 x 2

34. High speed lever assembly (0-E126)
    a.) Indication spring (E134)
    b.) Nut A (E133)
    c.) (0-E126) Indication plate assembly (0-E132)

35. Bottom winding mechanism
    a.) Bottom main gear screw (C265) — left handed
    b.) Winding transmission plate (C221)
    c.) Bottom main gear retainer plate (C220)
    d.) Bottom main gear (C219)
    e.) Bottom main gear retainer (C269)
    f.) Winding shaft supporter plate (C270) — W24
    g.) Winding shaft receptacle (C218)
    h.) Spool gear assembly (0-C216) — W16 (0.3t)

36. Winding shaft assembly (0-C19)

37. Restitution retainer lever (C22)
    a.) Supporter screw (C24)
    b.) (C22)
    c.) Restitution lever spring (C25)
    d.) Collar (C23)

38. Coupler pinion (E11) — Retainer screw (E12)

39. Reversing plate (E111)
    a.) C137 — b.) E111 — c.) E112 — W6

40. Intermediate gears
    a.) E107 — b.) E106 — c.) E104 — d.) E105 — e.) 0 E101

41. Hook plate (E153)
    a.) E154 — b.) E155 — c.) E153 — W1

42. Top 2nd gear assembly (0-C9)
    Top 2nd gear shaft retainer nut (C11)
    231K-E111-A or 234K-B83-A

- 43.Bounce stopper (E145)
    a.) E147 — b.) E146 — c.) E145 — W3 — d.) E152

44. Shutter curtain light seal (A17)
    After releasing the shutter, remove (A17)
    — CNS 1.7 x 2.5 x 2

45. Curtain stopper (E139)
    a.) After releasing curtain tension, remove Worm (E41 x 2)
    b.) Worm wheel (E42 x2) — left handed.
    c.) Curtain stopper screw (E143) — 23800K-E143-A
    d.) Curtain stopper retainer screw (E142)
    e.) (E140), (E141)
    f.) Not removing Curtain stopper (E139), retain it with (E142)

46. Shutter curtains
    a.) (C27) & (C28)
    b.) Curtain plate assembly (0-A25)
    c.) Shutter curtain mechanism
    0-C1, 0-E36, 0-E38, etc.

47. Top shaft receptacle (C17)
    Stopper retainer screw (C18) — CNS 1.7 x 1.8 x 2

48. Idle gear (C624) — CNL-F 1.7 x 1.8

49. Bottom shaft receptacle (C202)
    W73, CNS 1.7 x 1.6 x 2, CNS 1.7 x 2.5

50. Coupler gear assembly (0-C222)

Coupler gear retainer screw (C226) — left handed

51. Rewinding actuator lever assembly (0-C241)
    a.) CNL-B 1.4 x 2.0
    b.) Spring retainer.(C243)
    c.) Rewinding actuator lever spring (C242)
    d.) 0-C241

52. Bottom mec.plate assembly (C200)
    a.) Stopper pole (C267) — CNS 1.7 x 2.5
    b.) Coupler guide (C268)
    c.) C200
    d.) Sprocket (C236)

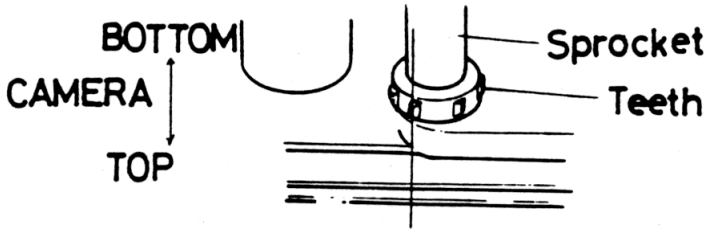
Assembly procedure

1. Bottom mec.plate assembly (C200)
   a.) Sprocket (C236)
   b.) Bottom mec.plate assembly (C200) — positioning with (C202)
   c.) C268, C267, CNS 1.7 x 2.5

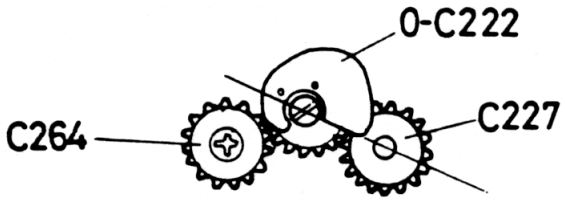
2. Spool
   a.) Install spool (0-C20) and Spacer (C29)
   b.) Top shaft receptacle (C17-01)
   c.) Bottom shaft receptacle (C202)
   Vertical clearance of Spool is adjusted with W73
   (t=0.5 or 0.6mm)
   d.) Idle gear (C264)

3. Rewinding actuator lever assembly (0-C241)
   As shown in Parts list

4. Coupler gear assembly (0-C222) — (C226) = left handed
   a.) Sprocket teeth is positioned as shown in Figure



   b.) When installing Coupler gear assembly (0-C222), it should be positioned as shown below, besides sprocket teeth should not be moved.



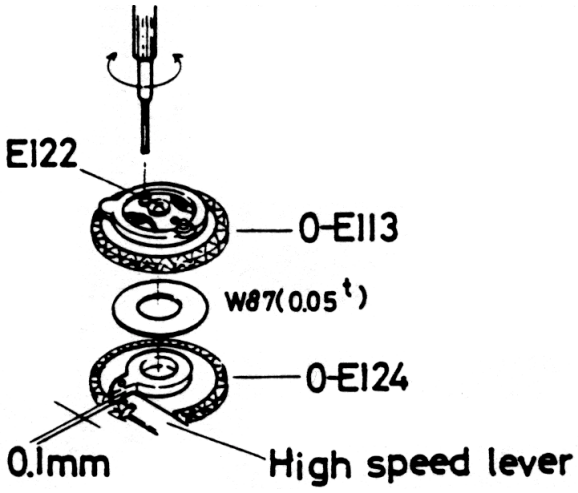
5. Shutter curtains
   a.) Top mec.plate assembly (0-C1) — C27, C28
   Curtain strings should not be off from rollers.

   b.).Curtain plate assembly (0-A25)
   Arrangement of both curtains is opposite from SP type camera.

6. Worm (E42) and Worm wheel (E41)
   Turn worm wheel two rounds to give the tension to both curtains.

7. Check 2nd curtain position after releasing 1st curtain
   a.) Install High speed lever assembly (0-E126) temporarily.
   Cock the shutter, and release 1st curtain, 2nd curtain should be staying at 5mm distant from picture frame.
   Shutter cocking tool — 23800K-E113, E124-A.

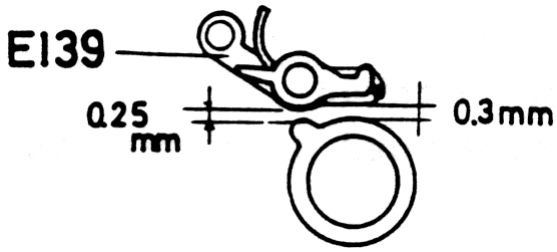
b.) When both curtains are wound and hooked with 1st curtain ratchet assembly (0-E135), adjust the clearance at 0.1mm between high speed.lever and Bottom selector gear assembly (0-E124) with turning Adjusting stud (E122).



8. Curtains overlapping
   After cocking the shutter, both curtains should be overlapping completely or within ± 0.1mm deviation.

9. Bounce stopper (E152)
   E152 — W3 — E145 — E146

10. Curtain stopper (E139)
    E139 — E140 — E142 — E143 — 23800K — E143-A — E147

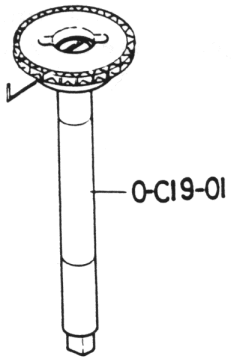


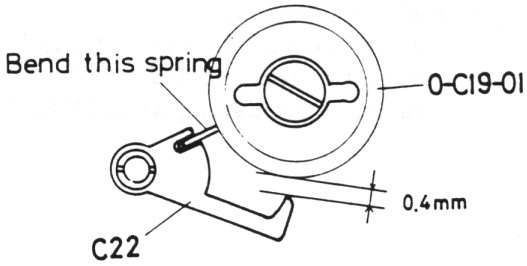
11. Top 2nd gear assembly (0-C9)-C11

12. Coupler pinion (E11) — E12 before cocking the shutter.

13. Restitution retainer lever (C22)
    C23 — C25 — C22 — C24

14. Winding shaft assembly (0-C19-01)
    a.) Clearance between (C22) and (0-C19-01) should be 0.4mm





b.) Bottom winding mechanism

W16 — 0-C216 — C218 — W24 — C270 — C269 — C219 — C220 — C221 — C265 (left-handed)

Caution;

* W16 should be installed first separately from (C216), otherwise (C216) can not be installed together with W16.

* When (C219) is installed, sprocket teeth should be positioned correctly as mentioned before. Perforation is adjusted definitely here.

15. Reversing plate (E111) and hook plate

a.) E112 — C26 — W6 — E111 — C137

Check the function and play of (E111), the play should be within 0.1mm

b.) W1-E153 — E155 — E154

16. Intermediate gears — Shutter cocked

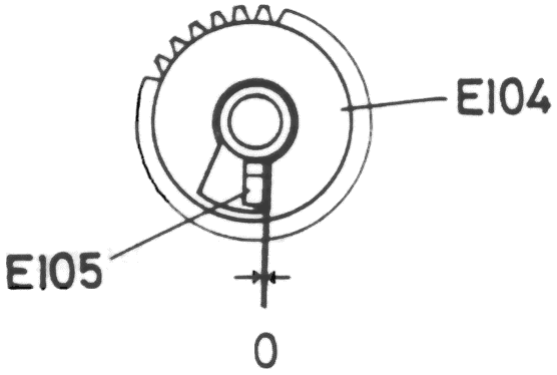
a.) Sprocket teeth should be positioned correctly as mentioned before.

b.) b.) 0-E101

c.) Spill (E105)

d.) E104

Clearance between (E104) and (E105) should be desirably closer to (0), but (E105) must move up and down smoothly without catching (E104).



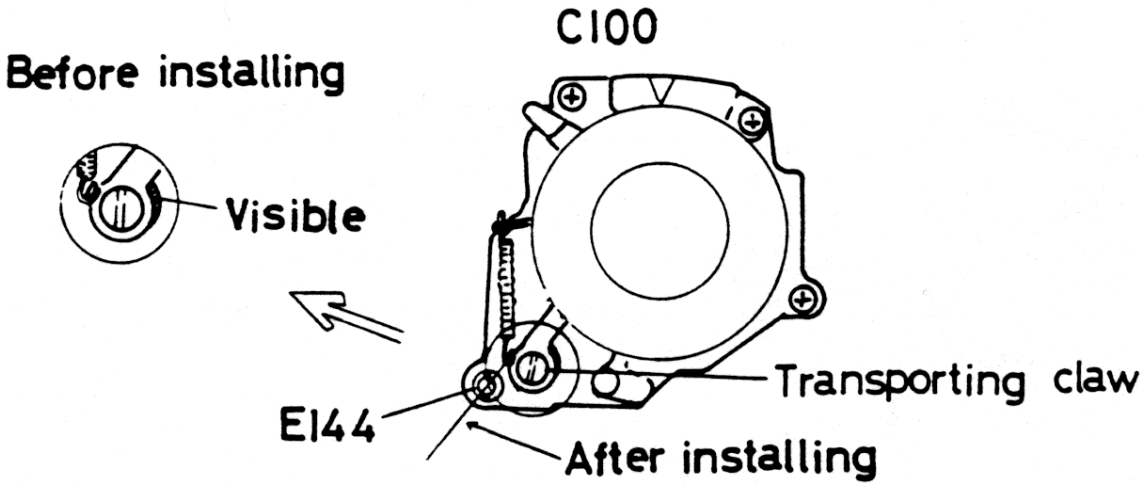
17. High speed lever assembly (0-E126)
— 0-E126 — 0-E132 — E133 — E134
* After installing the above parts, 1st curtain ratchet assembly (0-E135) functions automatically.

18. X contact seat assembly (0-J621) — CNS 1.7 x 2.5

19. Self-timer (H100) — CNM 2.0 x 9.0, CNM 1.7 x 3.0
* Install self-timer pushing upper left.

20. Shutter actuator plate A assembly (0-A501)
0-A501 — A514 — 0-A502 — 0-A504 — CNL-D 1.4 x 2.0 x 3

21. Winding seat assembly (C100) — together with winding lever
— Back cover open.
* Confirm the position of transporting claw before installing as shown in figure.



* Straight parts of transporting claw should align with the center of Nut B (E144) with shutter cocked and back cover close.

* Check counter dial movement, counter dial should be transported till 37 point, not 38. If counter dial proceeds till 38 point, reinstall Winding seat assembly (C100) as mentioned above.

* After cocking shutter, check the clearance between Curtain stopper (E139) and Top selector gear assembly (0-E113), 0.1mm is enough.

22. Slow speed cam shaft (E401)
E401 — E405 — LW17 x 3 — W70

* Up and down play of (E401) should be within 0.1mm.

23. Shutter seat plate assembly (E200)
    a) Cock the shutter
    b) Put on selector gear collar (E123)
    c) High speed cam assembly (0-E210)
    d) Install (E200) taking care of jointing part with slow speed cam shaft.

24. Bulb coupler lever spring (C263)

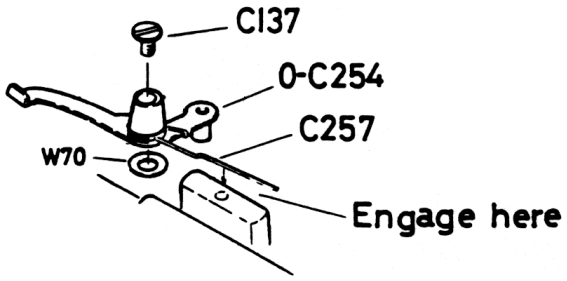
25. Switch plate assembly (0-J521) Main SW
— CNL-D 1.7 x 3.5 x 2

* When installing it, take care of shortage or leakage to camera body.

26. Installing seat assembly (0-A508) — CSS 1.7 x 2.2 x 2

27. Coupler lever assembly (0-C244)
    a) Cord holder (J525) — Coupler lever spring hook screw (C214)
    b) (0-C244) — Coupler lever retainer screw (C248) — left handed
    c) Coupler lever spring (C266)
    d) Check the function of (0-C244)

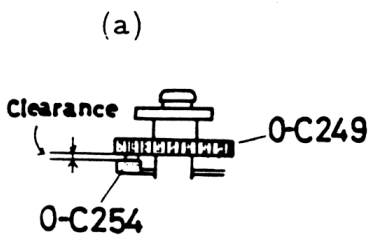
28. Pinion coupler lever assembly (0-C254)
W70 — 0-C254 — C257 — C137

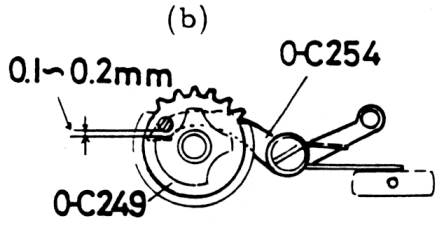


29. Pinion coupler gear assembly (0-C249)

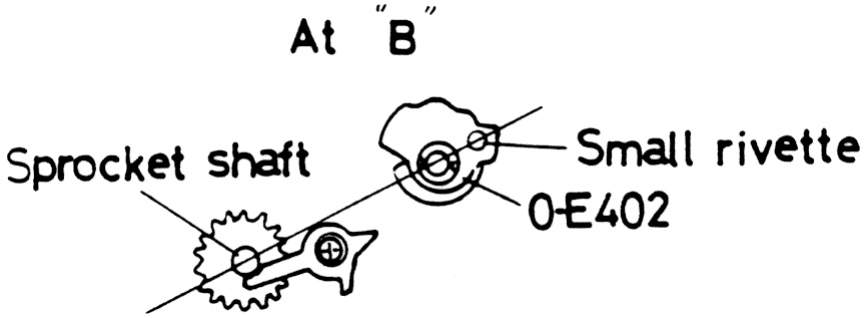
* After installing (0-C249), (0-C254) should not touch to (0-C249).
See Figure (a)

* After winding up, the least clearance (0.1 — 0.2) is necessary between the rivet of (0-C249) and the lever of (0-C254).
See Figure (b)

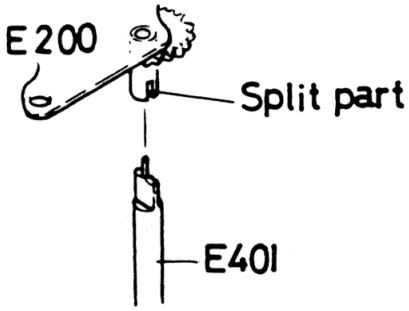




30. Slow speed cam assembly (0-E402)
    a) Shutter speed at B
    b) Small rivet of (0-E402) should align straight with the center of (E401) and sprocket shaft as shown in Figure, and fasten Nut (E406) catching (E401) with pliers.
    Fasten set screws also.

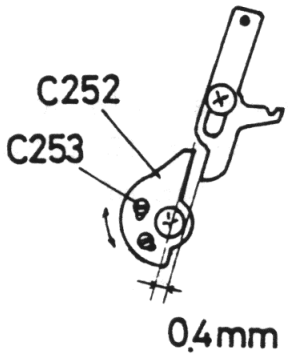


* When (E406) is fastened without catching (E401) with pliers, jointing split part underneath (E200) spreads with revolving power of (E401), and slower shutter speed will be affected.



31.Governor (G100) — CNM 1.7 x 2.0, CNM 1.4 x 2.0
    a) Shutter speed at 1/125
    b) Install (G100) without bending small levers (such as angle lever etc).

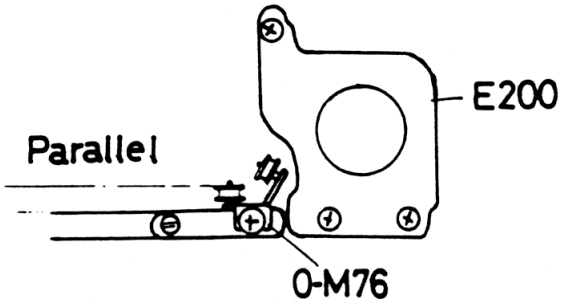
32. Governor actuator plate (C252)
    a) Shutter speed at B
    b) Cock the shutter
    c) (C252) — (C253) x 2 as shown in Figure



33. Shutter curtain light seal (A17)— CNS 1.7 x 2.5 x 2

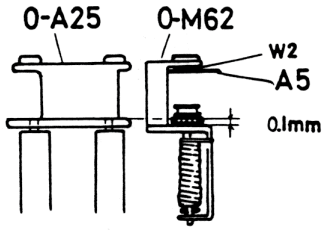
34. Tv indication
    a) Shutter speed at 1/1000
    b) Lower pulley of Pulley seat assembly (0-M76) should be in parallel with camera.
    c) Adjusting plate assembly (0-M68) — (M72) = left handed
    d) Restitution spring assembly (0-M62) — (A5) — (M85)

b.)

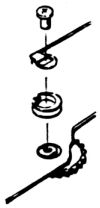


* Turn wire 1 turn counter-clockwise around the pulley of (0-M62)

d.)



Fasten the screw with out turning brass gear



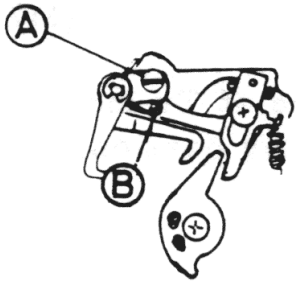
* After installing (0-M62), Tv wire should not be loose.
•If it is loose, give tension by moving (0-M68), but too much tension makes it harder to adjust the position of Indication plate (M61).

e) (M73) — (0-M74) — (M75)
* Gear of (0-M62) and (0-M74) should be gearing not too deep, and check the function.

35. Mirror housing complete assembly (B000)
    a) Battery seat assembly (0-A) — CNS 1.7 x 2.5 x 2
    b) (B000) should be installed taking care of coupling two gears (M74) and (0-M53).
    c) (E407) — (E408) — (E409) — W3

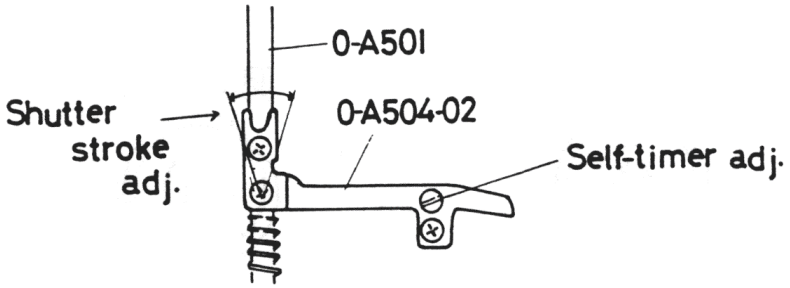
36. Terminal contact assembly (0-J611)
Soldering lead wires 8 pcs.

37. Shutter speed adjustment
a) Curtain speed 12.2 — 12.3ms
Same way with SP camera.
b) High speed adjustment 1/1000 — 1/60ms
Same way with SP camera
c) Slow speed adjustment 1/30 — l sec

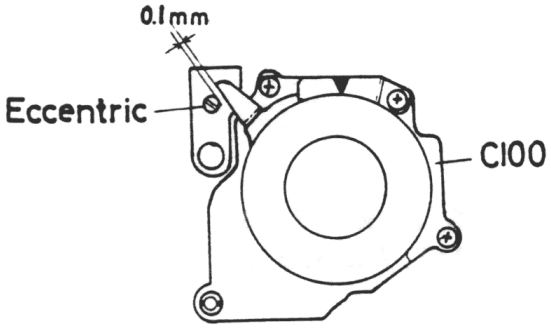


1 Loosen screw
2 Adjust with eccentric screw
3 Fasten screw
4 Apply red lacquer on screw

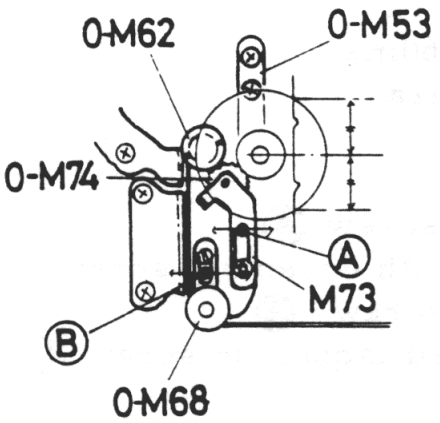
38. Shutter stroke — Shutter dial at B
a) Install Top cover assembly (A300) and Winding lever assembly (C300) temporarily.
b) Depressing shutter button gradually, shutter starts working at 2.1 ± 0.2mm from origina1 position.
c) Self-timer exposure time adjustment at B.(Around 1000ms)

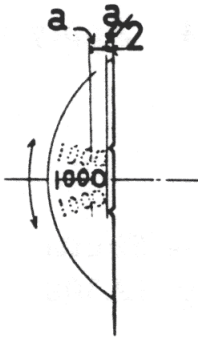


39. Main SW keep adjustment
Main SW stroke
— 0.6 ± 0.2mm



40. Tv indication
a) Shutter speed at 1/1000
b) Positioning adjustment of Supporter plate assembly (0-M53).





1 Tv indication dial should be set just center portion of viewing finder.

2 Tv indication (1000) should be set as shown in Figure.

3 Three jointing gears (0-M53), (0-M62) and (0-M74) must function well.If they do not, adjust the position of Idle gear supporter plate (M73) with eccentric screw **A**

4 Each figure of Tv indication must come in the center portion, adjusting eccentric screw **B**

41. Front board plate assembly (A100).
Mechanical back 45.46mm

42. Sv resistor assembly (J300) — (E208)

43. P.C.board assembly (H500)
a.) LED
(A41-01) — W3 — CNM 1.7 x 2.5 — CNL-D 1.4 x 2.5
b.) GPD
(J205) — (J206) — (J208)
c.) Bonding (J500) to Penta prism cover
d.) (J204) — (J209) x 2

44. Soldering lead wires — 7pcs

45. Bottom cover assembly (A400) — CSS 1.7 x 2.2 x 3
Tripod screw (All) — CSM 1.7 x 3.5 x 2

46. Adjustment of LED indication place

47. Light measurement

a.) Temporary setting — Top cover tool, shutter dial, winding lever

b.) Battery checker — VR **A**

EV12, f8, 1/60, ASA100

2.6V Light off

2.7V Light on

c.) Light measurement — VR **B** or VR **C**

EV12, f8, 1/60, ASA 100, 2.8V

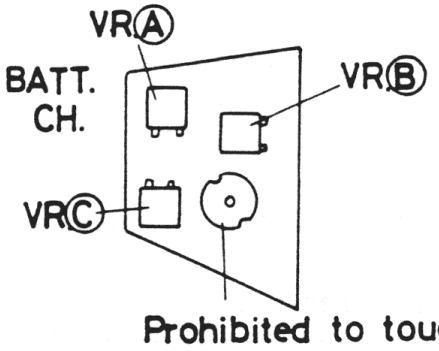
When shutter dial is turned 1EV step (1/60 — 1/30 and A/60 — 125), and both red LED (over and under) light on, it shows within 0.1EV difference.

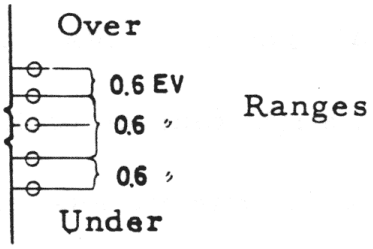
d.) Confirmation of voltage reliability

EV12, f8, 1/60, ASA100

When voltage is dropped down from 2.8V to 2.7V, LED indication should not change.

e.) When mirror stays up, LED should not light on.Check it at B.





48. Focusing adjustment

a.) Removing Top cover tool and others

b.) Adjust focusing with Focusing screw (M6) x 4

49. Adjustment of Focusing plate holder assembly (0-B101)

If vertical play is felt on (0-B101), remove Cover plate (B109) and adjust the position of Hook metal assembly (0-M107) with eccentric screw.

50. Top cover assemb1y (A300)

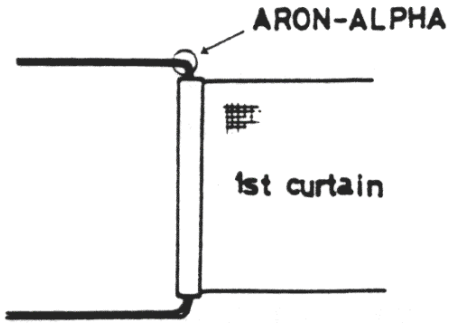
Winding lever, shutter dial, rewind knob and other small parts.

Tools — 23110K-D16-1-A
23800K-E231-A
23600K-C135-A

51. Bonding Coverings (A19 & A20)

Curtain assembly

1. Curtain inspection



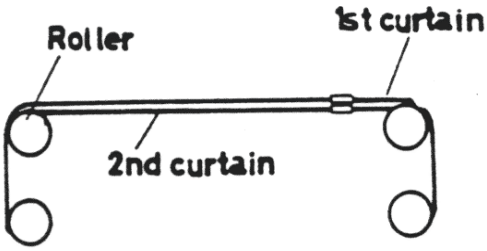
Check if Aron-alpha is applied to curtain string as shown in Figure.
Aron-alpha is applied to increase durability.Curtain string should be, bent parallel with shutter curtain.

2. Install 1st and 2nd pinion shafts (0-E2, 0-E7), (0-E118), (0-E108), (0-E135) and 2nd curtain assembly (0-E38) to Top mec.plate assembly (0-C1).

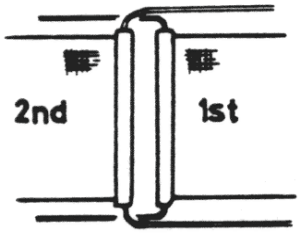
3. Install Top mec.plate assembly (0-C1) to camera body temporarily.

4. Give slight tension to 2nd curtain.

5. Install 1st curtain assembly (0-E36) and Curtain plate assembly (0-A25).



Give slight tension to 1st curtain.
Arrangement of both curtains is opposite from SP type camera.
Install 1st curtain (0-E36) engaging 2nd curtain string with the rollers.

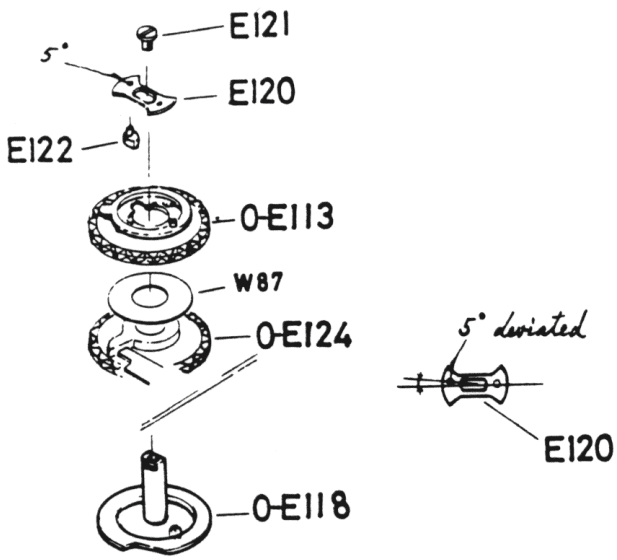


6. Removing Top mec.plate assembly (0-C1) from camera body for a while, engage 1st curtain string with the 2nd curtain pinion rollers and re-install Top mec.plate assembly (0-C1) to camera body without slipping off the string from rollers.

7. 2nd curtain hold position — with shutter cocked 2nd curtain should stay at 5mm distant from picture frame when High speed lever hooks Bottom selector gear assembly (0-E124).
Adjust the position of 2nd curtain with changing the coupling between 2nd pinion gear and (0-E124).

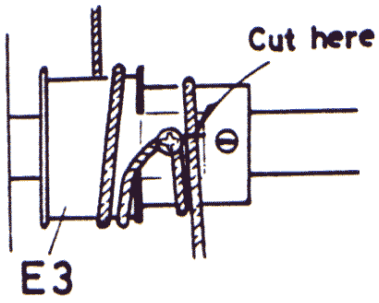
8. Install Top selector gear assembly (0-E113) with shutter released, facing the retainer screws of 1st curtain pinion 45° forward.

9. Install adjusting plate (E120) and other parts.



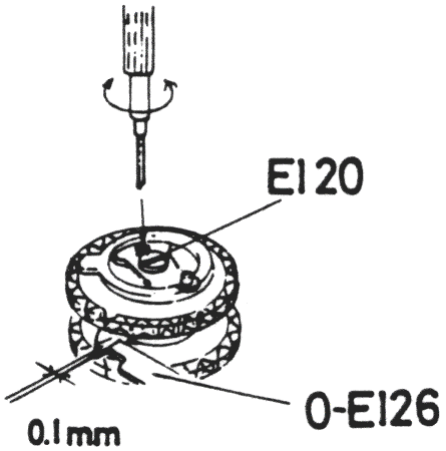
Adjusting plate (E120) is installed after turning Top selector gear and Selector retainer (0-E118) to cocked position.

10. Install 1st curtain string to bobbin (E3).

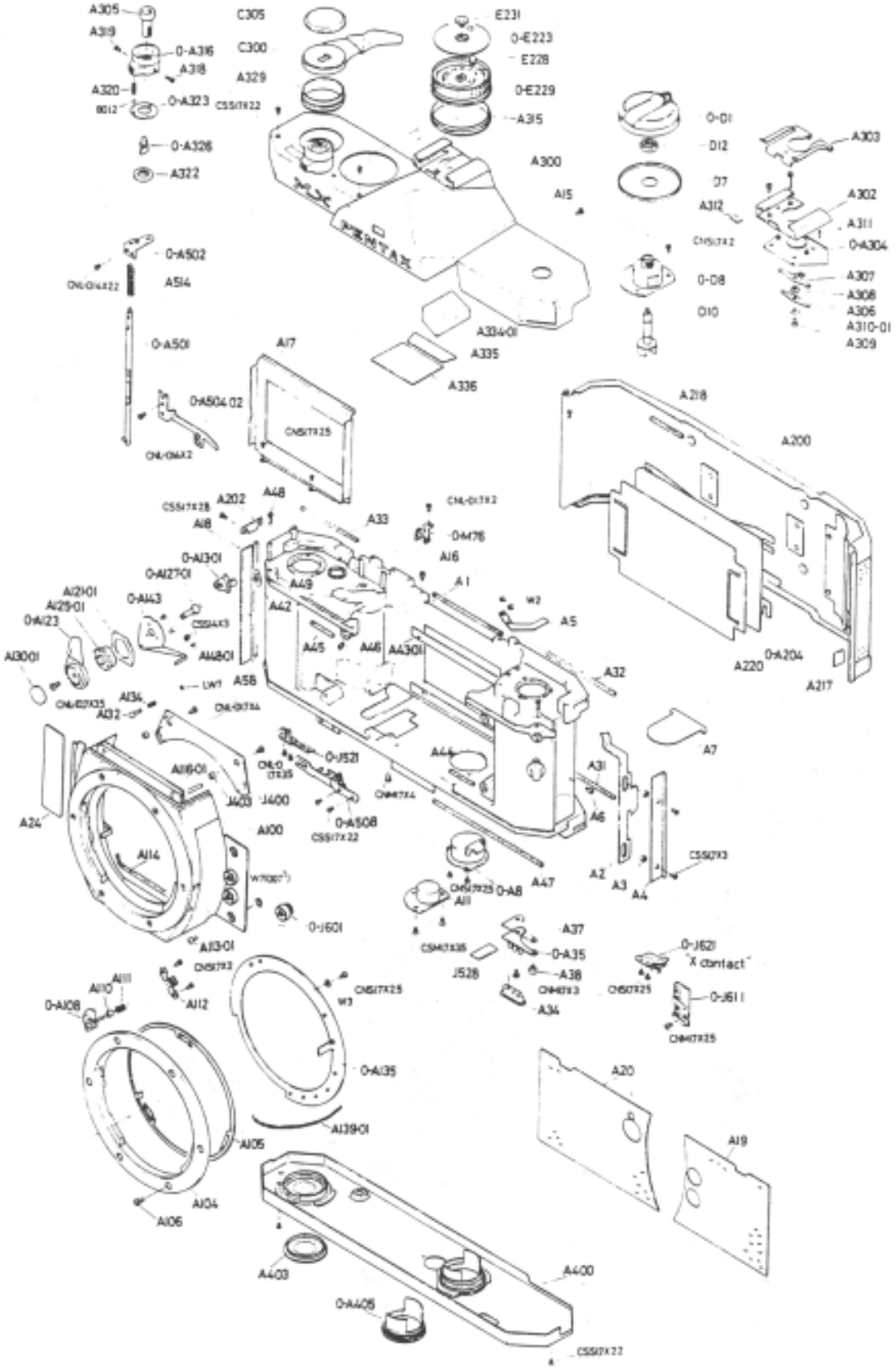


Confirm curtain overlapping and slit parallel, with adjusting the length of 1st curtain string.Aron-alpha is applied to curtain string and its retainer screw (CNS 1.4 x 1.6) after adjustment is finished, and cut the curtain string after turning around the Bobbin one time on the other way.

11. Clearance between Bottom selector gear assembly (0-E124) and High speed lever assembly (0-E126) should be adjusted at 0.1mm with cocked position by turning Adjusting plate (E120).
After adjustment, apply aron-alpha to Retainer screw (E121).



EXPLODED ILLUSTRATION

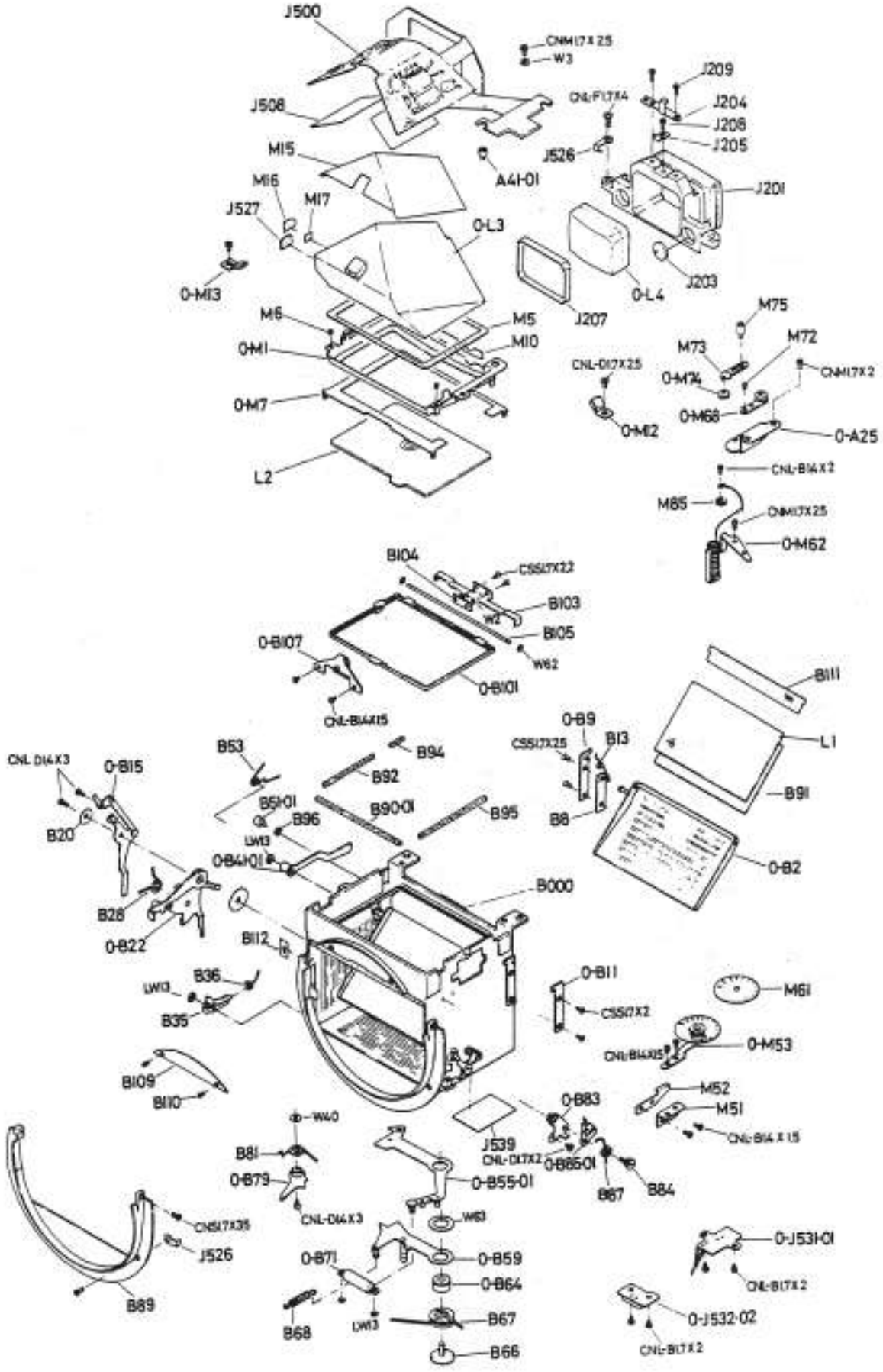


Product No. 23800

ASAHI PENTAX MX

Fig. 1

EXPLODED ILLUSTRATION

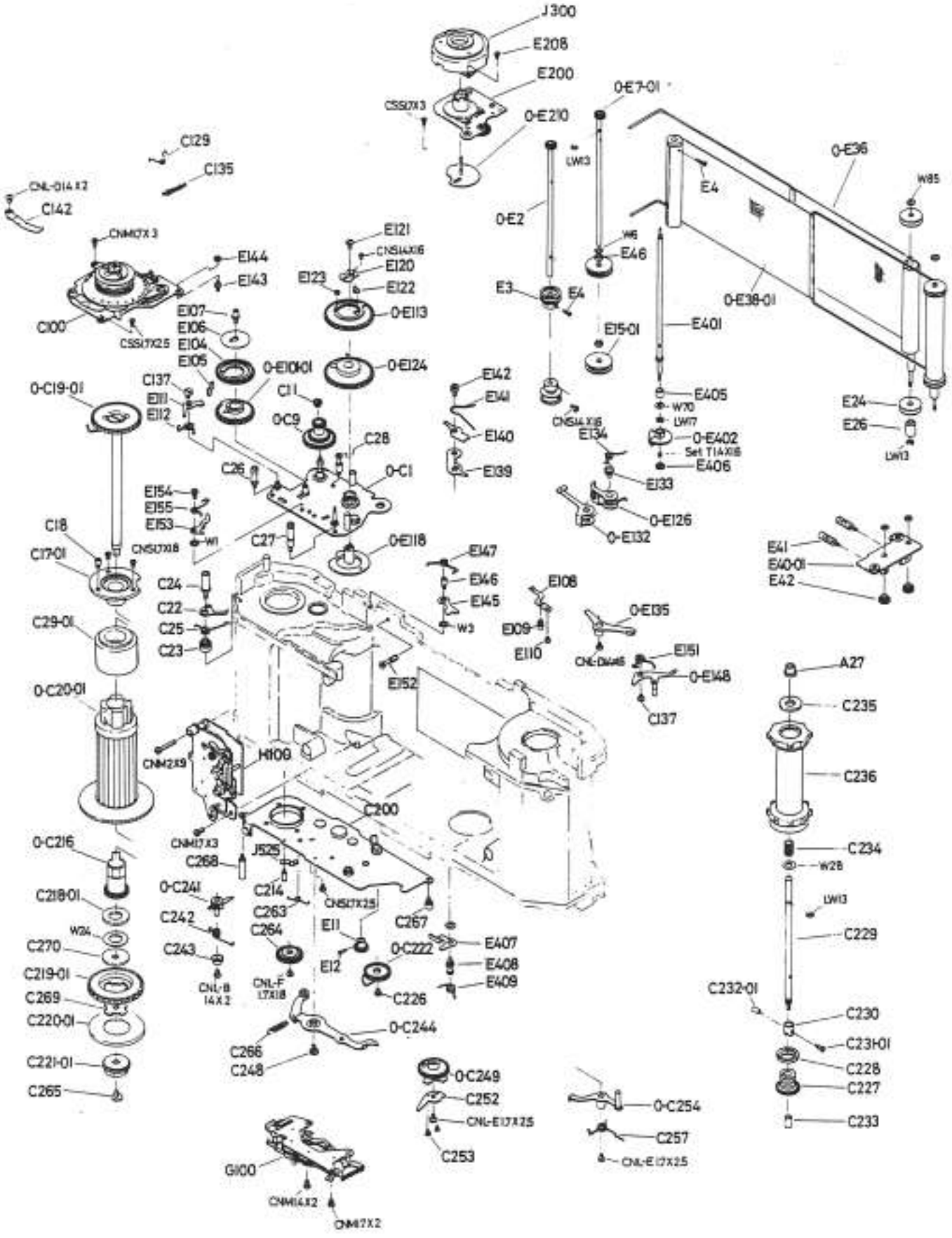


Product No. 23800

ASAHI PENTAX JMDX

Fig. 2

EXPLODED ILLUSTRATION

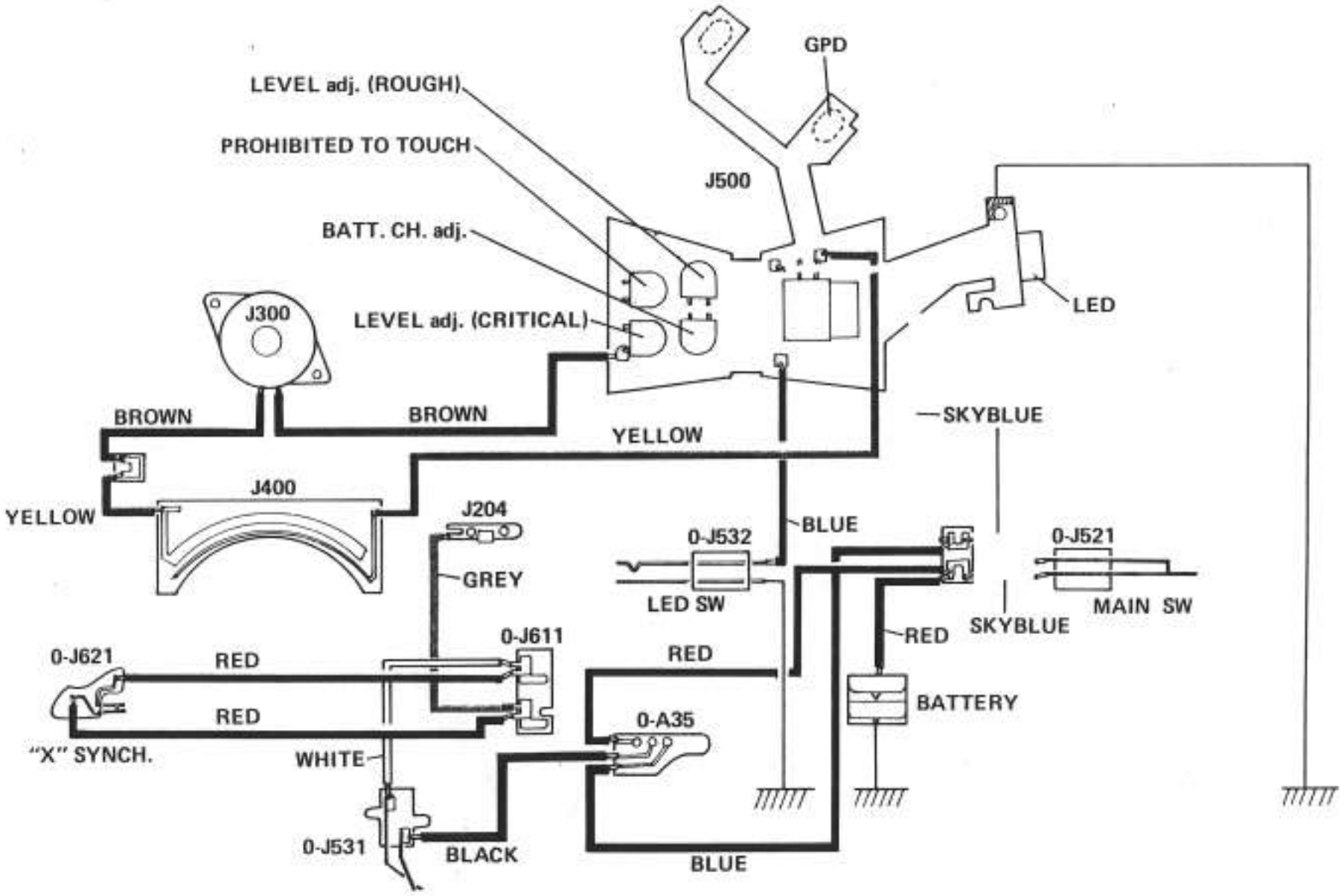


Product No. 23800

ASAHI PENTAX MDX

Fig. 3

DISTRIBUTING WIRES



Product No. 23800

ASAHI PENTAX MX

Fig. 4

LIST OF SERVICE PARTS

Product No.23800
ASAHI PENTAX MX

Note: 1. The parts with numbers starting '0-' are assemblies.

2. 0nly available parts are listed below.

Parts No.	Description	Quantity	Interchangeability
A1	Body proper	1	
A2	Hinge	1	
A3	Hinge collar	2	
A4	Hinge retainer plate	1	
A5	Hinge retainer spring	1	
A6	Back cover guide screw	1	
A7	Cassette receptacle	1	
0-A8	Battery seat assembly (A8, A9, A10 x 2)	1	
A11	Tripod screw	1	23602-A23
0-A13-01	Strap hook assembly (A13-01, A14)	1	
A15	Top cover retainer screw	2	
A16	Mirror box retainer screw	2	
A17	Shutter curtain light seal	1	
A18	Light seal	1	
A19	Body covering, left	1	
A20	Body cuvering, right	1	
A24	Cover	1	
0-A25	Curtain plate assembly (A25, M7 1 x2)	1	
A27	Sprocket shaft receptacle	1	
A31	Light seal A	1	
A32	B	1	
A33	C	2	
A34	Connector seat	1	
0-A35	Connector base plate assembly (A35, A36 x3)	1	
A37	Insulation plate	1	

Parts No.	Description	Quantity	Interchangeability
A38	Connector retainer screw	1	
A41-01	Base plate screw	1	
A42	Spacer	1	
A43-01	Light seal curtain	2	
A44	Light seal D	2	
A45	Light seal E	2	
A46	Light seal F	1	
A47	Light seal G	1	
A48	Strap hook retainer screw	2	
A49	Light seal tape	1	
A100	Front board plate assembly (A101 — A149, 0-J401, 0-J601 x 2)	1	
A104	Mount ring	1	
A105	Mount spring	1	23602-A105
A106	Mount screw	6	23602-A106
0-A108	Mount lock button assembly (A108, A107, A109)	1	
A110	Collar	1	
A111	Lock button spring	1	
A112	Lock pin supporter plate	1	
A113-01	Front board retainer screw	4	23602-A159
A114	Front board light seal	1	23701-A120
A116-01	Front board light seal	2	
A121-01	Base plate	1	
0-A123	Charge lever assembly (A123, A122-01, A124)	1	
A125-01	Charge lever shaft A	1	
0-A127-01	Charge lever shaft B assembly (A127-01, A145)	1	
A130-01	Button cover	1	
A132	Start button	1	
A134	Spring B	1	
0-A135	Diaphragm coupler ring assembly (A135, A136 x 5, A137 x 5, A138, A140)	1	
A139-01	Diaphragm coupler ring spring	1	
0-A143	Supporter plate assembly (A143, A144, A146, A147, A148-01)	1	

Parts No.	Description	Quantity	Interchangeability
A148-01	Restitution spring	1	
A149	Front board light seal	1	
A200	Back cover assembly (A201, A203, A207, A208 x 2, A209, A210 x4, A211, A212, A213, A214, A215, A216 x 4, A217 x 2, A218 A219, A221, A222-01 x 4, A225, A226, A227)	1	
A202	Back cover shaft receptacle	2	
0-A204	Pressure plate assembly (A204, A205, A206 x 2)		
A217	Light seal A	2	
A218	Light seal B	1	
A220	Pressure plate cover	1	23701-A220
A300	Top cover assembly (A301 — A336)	1	
A302	Accessory shoe	1	
A303	Accessory shoe spring	1	
0-A304	Accessory shoe base assembly (A304, A305)	1	
A306	Contact spring A	1	
A307	Contact spring B	1	
A308	Collar	1	
A309	Retainer screw	1	
A310-01	Insulation washer	1	23602-A327
A311	SW pin	2	
A312	Indication plate	1	23701-A307
A315	Cover ring A	1	
0-A316	Shutter button seat assembly (A316 ,A317)	1	
A318	Guide screw A	1	23602-A317
A319	Guide screw B	1	23602-A318
A320	Spring	1	23602-A320
A322	Nut	1	
0-A323	Click plate assembly (A323, A324)	1	
A325	Shutter button	1	
0-A326	Shutter button core assembly (A326.A327, A328)	1	
A329	Cover ring B	1	

Parts No.	Description	Quantity	Interchangeability
A330-01	Window C	1	
A332-01	Mask	1	
A334-01	Pattern retainer	2	
A335	Light seal	1	
A336	Insulation tape	2	
A400	Bottom cover (A401, A406)	1	
A403	Bottom winding cap	1	
0-A405	Battery cap assembly (A405, A406)	1	23602-0-A403
0-A501	Shutter rod assembly (A501, A505, A507)	1	
0-A502	Release plate assembly (A502, A503, A506, A516)	1	
0-A504-02	Shutter actuator plate A assembly (A504-02, A515-02, A516, CNL-D 1.4 x 2.5)	1	
0-A508	Installing seat assembly (A508, A509, A510, A511, A512, A513, LW13)	1	
A514	Shutter rod spring	1	
B000	Mirror housing complete assembly (B1 — B112, 0-J531-01, 0-J532-02)	1	
0-B2	Mirror seat assembly (B2, B3, B4, B5, B6 x 4, B7)	1	
B8	Spacer	1	
0-B9	Supporter, right assembly (B9, B10)	1	
0-B11	Supporter left assembly (B 11, B12)	1	
B13	Mirror seat restitution spring	1	
0-B15	Mirror actuator lever, bottom assembly (B15, B16, B17, B18 x 2, B19, B46)	1	
B20	Washer	1	
0-B22	Diaphragm coupler lever assembly (B22, B21, B23, B24 x 2, B25-01, B26-01, B29, B30, B31-01, B32-01, B33, B34)	1	
828	Diaphragm actuator lever connection spring	1	
B35	Hook plate	1	
B36	Hook plate spring	1	
0-B41-01	Actuator lever plate assembly (B41-01, B40-01)	1	

Parts No.	Description	Quantity	Interchangeability
B51-01	Stopper screw	1	
B53	Diaphragm actuator lever spring	1	
0-B55-01	Mirror actuator plate assembly (B55-01, B56, B57, B58, B93)	1	
0-B59	Mirror charge lever assembly (B59, B60, B61, B62, B63.)	1	
0-B64	Mirror charge lever retainer assembly (B64, B65)	1	
B66	Mirror charge lever collar screw	1	
B67	Restitution spring		
B68	Mirror seat spring		
0-B71	Shock absorber assembly (B71, B72, B73)	1	
0-B79	Mirror charge hook plate assembly (B79, B80)	1	
B81	Hook plate spring	1	
0-B83	Mirror seat receptacle assembly (B83, B88)	1	
B84	Mirror seat receptacle screw	1	
0-B85-01	Mirror seat receiver assembly (B85-01, B86)	1	
B87	Mirror seat recever spring	1	
B89	Light seal frame	1	
B90-01	Mirror shock absorber	1	
B91	Mirror adhesive tape	1	
B92	Light seal A	1	
B94	Light seal B	1	
B95	Light seal C	1	
B96	Stopper washer	1	23701-B70
0-B101	Focusing plate holder assembly (B 101, B 102)	1	
B103	Shaft receptacle	1	
B104	Spacer	1	
B105	Shaft	1	
0-B107	Hook metal assembly (B 107, B108)	1	
B109	Cover plate	1	
B110	Retainer screw	2	

Parts No.	Description	Quantity	Interchangeability
B111	Light seal curtain	1	
B112	Light seal curtain B	1	
0-C1	Top mec.plate assembly (C1, C2, C3, C4 x 2, C5, C6, C7, C8, E5)	1	
0-C9	Top 2nd gear assembly (C9, C10)	1	
G11	Top 2nd gear shaft retainer nut	1	
C17-01	Top shaft receptacle	1	
C18	Stopper retainer screw	1	
0-C19-01	Winding shaft assembly (C19-01, C12, C13, C14, C15-01, C16)	1	
0-C20-01	Spool assembly (C20-01, C21 x 16, C30)	1	
C22	Restitution retainer lever	1	
C23	Collar	1	
C24	Supporter screw	1	
C2S	Restitution lever spring	1	
C26	Winding plate supporter	1	
C27	Top cover supporter	1	
C28	Top mec. plate screw	1	
C29-01	Spacer	1	
C100	Winding seat assembly (C101 — C142)	1	
C200	Bottom mec.plate assembly (C201 — C215, C262, E6, E15, E44)	1	
C214	Coupler lever spring hook screw	1	
0-C216	Spool gear assembly (C216, C217)	1	
C218-01	Winding shaft receptacle	1	
C219-01	Bottom main gear	1	
C220-01	Bottom main gear retainer plate	1	
C221-01	Winding transmission plate	1	
0-C222	Coupler gear assembly (C222, C223, C224, C225 x 2)	1	
C226	Coupler gear retainer screw	1	
C227	Sprocket gear	1	
C228	Sprocket retainer	1	
C229	Sprocket shaft	1	

Parts No.	Description	Quantity	Interchangeability
C230	Clutch ring	1	
C231-02	Clutch ring retainer screw	1	23602-C14
C232-01	Clutch ring retainer screw collar	1	23602-C15
C233	R button	1	
C234	Sprocket spring	1	23602-C11
C235	Sprocket collar	1	
C236	Sprocket	1	
0-C241	Rewinding actuator lever assembly (C241, C237, C238, C239, C240)	1	
C242	Rewinding actuator lever spring	1	
C243	Spring retainer	1	
0-C244	Coupler lever assembly (C244, C245, C246, C247)	1	
C248	Coupler lever retainer screw	1	
0-C249	Pinion coupler gear assembly (C249, C250)	1	
C252	Governer actuator plate	1	
C253	Governer actuator plate screw	2	
0-C254	Pinion coupler lever assembly (C254, C255, C256)	1	
C257	Pinion coupler lever spring	1	
C263	Bulb coupler lever spring	1	
C264	Idling gear	1	
C265	Bottom main gear screw	1	
C266	Coupler lever spring	1	
C267	Stopper pole	1	23701-C18
C268	Coupler guide	1	
C269	Bottom main gear retainer	1	
C270	Winding shaft supporter plate	1	
C300	Winding lever assembly (C301, C302, C303 x 4, C304, TCSM 1.4 x 3.5)	1	
C305	Retainer screw	1	
0-D1	Knob assembly (D1, D2, D3, D4, D5, D6)	1	
D7	Cover ring	1	
0-D8	Shaft receptacle assembly (D8, D9, D11)	1	

Parts No.	Description	Quantity	Interchangeability
D10	Rewind shaft	1	
D12	Nut	1	
0-E2	1st curtain pinion shaft assembly (E2, E1)	1	
E3	Bobbin	2	
E4	Retainer screw	3	
0-E7-01	2nd curtain pinion shaft assembly (E7-01, E1)	1	
E11	Coupler pinion	1	
E12	Coupler pinion screw	1	
E15-01	Roller A	2	
E24	Roller B	2	
E26	1st curtain shaft collar	1	
0-E36	1st curtain assembly (E36, E20, E21, E22, E23, E24, E25, E35, E37)	1	
0-E38-01	2nd curtain assembly (E38-01, E4, E8, E9, E10, E27, E28, E29, E30, E31, E32, E33, E34, E35, E39)	1	
E40-01	Bottom shaft rest	1	
E41	Worm	2	
E42	Worm wheel	2	
E46	Collar	2	
0-E101-01	Intermediate gear, bottom assembly (E101-01, E102, E13)	1	
E104	Intermediate gear, top	1	
E10S	Spill	1	
E106	Spill retainer plate	1	
E107	Intermediate gear retainer screw	1	
E108	Spill spring	1	
E109	Spill spring screw A		
E110	Spill spring screw B	1	
E111	Reversing plate	1	
E112	Reversing spring	1	
0-E113	Top selector gear assembly (E113, E114, E115 x 2, E116, E117)	1	
0-E118	Selector retainer assembly (E118, E119)	1	
E120	Adjustable plate	1	

Parts No.	Description	Quantity	Interchangeability
E121	Adjustable plate screw	1	
E122	Adjusting stud	1	
E123	Selector gear collar	1	
0-E124	Bottom selector gear assembly (E124,E115, E125)	1	
0-E126	High speed lever assembly (E126, E127, E128, E 129, E130, E131, E137)	1	
0-E132	Indication plate assembly (E132, E138)	1	
E133	Nut A	1	
E134	Indication spring	1	
0-E135	1st curtain ratchet assembly (E135, E136)	1	
E139	Curtain stopper	1	
E140	Lubrication tube retainer	1	
E141	Lubrication tube	1	23701-E276
E142	Curtain stopper retainer screw	1	
E143	Curtain stopper screw	1	
E144	Nut B	1	
E145	Bounce stopper	1	
E146	Bounce stopper screw	1	
E147	Bounce stopper spring	1	
0-E148	Synchro actuator plate assembly (E148, E149, E150)	1	
E151	Synchro actuator spring	1	
E152	Bounce adjusting screw	1	
E153	Hook plate	1	
E154	Hook plate screw	1	
E155	Hook plate restitution spring	1	
E200	Shutter seat plate assembly (E201, E202, E203, E204, E205, E206, E207, E208, E209-01, E212, E232)	1	
0-E210	High speed cam assembly (E210, E211)	1	
0-E223	Shutter dial assembly (E223, E224)	1	
E228	Hook pin	1	
0-E229	Speed dial assembly (E229, E221, E222 x3 , E225, E226 x 3, E227, E229, E230)	1	

Parts No.	Description	Quantity	Interchangeability
E231	Shutter dial screw	1	
E401	Slow speed cam shaft	1	
0-E402	Slow speed cam assembly (E402, E403, E404)	1	
E405	Spacer	1	
E406	Nut	1	23723-C419
E407	Governor restitution plate	1	
E408	Restitution plate shaft	1	
E409	Restitution plate spring	1	
G100	Governer	1	
H100	Self-timer	1	
J201	Cell frame	1	
J203	Light metering lens	2	
J204	Hot shoe contact	1	
J205	P.C.board retainer plate	1	
J206	Spring	1	
J207	Mask	1	
J208	P.C.board retainer plate screw	1	
J209	Hot shoe contact screw	2	23602-N15
J300	Sv resistor assembly (J301 — J307)	1	
J400	f-volume assembly (J401, J402)	1	
J403	Collar	2	
J500	P.C.board assembly (J501, J502, J503, J504, J506, J507-01)	1	
J508	Adhesive tape	1	23700-J507
0-J521	SW plate assembly (J521, J522, J532-01, J524 x 2)	1	
J525	Cord holder A	1	
J526	Cord holder	4	23700-J206
J527	Relay P.C.board	1	
J528	Relay P.C.board	1	23701-A157
0-J531-01	SW plate A assembly (J531-01, J533-01, J535-02, J537, J613 x 4)	1	
0-J532-02	SW plate B assembly (J532-02, J534-02, 3538, 1613 x 2)	1	

Parts No.	Description	Quantity	Interchangeability
J539	Adhesive tape		
0-J601	Synchro terminal assembly (J601, 3602, J603)	2	
0-J611	Terminal contact assembly (J611, J612 x2, J613 x4)	1	
0-J621	X contact seat assembly (J621, J622, J623, J624, J625 x 4)	1	
L1	Mirror	1	
L2	Fresnel lens	1	
0-L3	Penta prism assembly (L3, L6-01, M11)	1	
0-L4	Eyepiece assembly (L4, L5)	1	
0-M1	Prism seat assembly (M1, M2 x 2, M3 x 2, M4 x 4, M5, M10)	1	
M5	Ground glass mask	1	
M6	Focusing screw	4	
0-M7	Receptacle plate assembly (M7, M8 x 4, M9 x 4)	1	
M10	Penta mask	1	
0-M12	Penta retainer plate A assembly (M12, M14)	1	
0-M13	Penta retainer plate B assembly (M13, M14)	1	
M15	Prism protector	1	
M16	Penta retainer plate	2	
M17	Penta retainer plate tape	2	
M51	Seat	1	
M52	Cover plate	1	
0-M53	Supporter plate assembly (M53, M54, M55, M56, M57, M58, M59, M60, M61)	1	
M61	Indication plate	1	
0-M62	Restitution spring assembly (M62, M63, M64, M65, M66, M67, M82, M84, M86)	1	
0-M68	Adjusting plate assembly (M68, M69, M70)	1	
M72	Adjusting plate screw	1	
M73	Idle gear supporter plate	1	

Parts No.	Description	Quantity	Interchangeability
0-M74	Idle gear assembly (M74, M83)	1	
M75	Screw	1	
0-M76	Pulley seat assembly (M76, M77, M78, M79, M80, M81)	1	
M85-00A	Bobbin A	1	
-00B	Bobbin B		

LIST OF STANDARD PARTS

Product No.23800
ASAHI PENTAX MX

Small screws:

Description	Surface treatment	Position of use	Quantity
Set T 1.2 x 2	Black nickel	M62, M67	1
Set T 1.4 x 1.8	“	E402, E401	2
Set T 1.7 x 2.2	“	E40, E41	2
Set F 1.4 x 2.5	“	E129,E137	1
Set F1.7 x 3.5	“	A1	1
CNS 1.4 x 1.4	“	E113, E120	2
CNS 1.4 x 1.6	“	A506, A501 1E3, E37	1 2
CNS 1.4 x 2	“	G100, G201	1
CNS 1.7 x 1.5	“	A17, A1	2
CNS 1.7 x 1.6	“	C202, C201	2
CNS 1.7 x 1.8	“	C17,A 1	2
CNS 1.7 x 2	“	A112, A101 D8, A1 J531, B1 L3M1	2 3 2 2
CNS 1.7 x 2.5	“	A135, A101 A8, A1 M51, B1 C202, A1 J621, A1 C201, A1	2 2 2 1 2 1
CNS 1.7 x 3.5	“	B89, B1	4
CNM 1.4 x 2.5	“	D6, D1	2
CNM 1.7 x 2	“	A61, A1 A25, A1 C100, A1	2 2 1
CNM 1.7 x 2.5	“	C201, A1 M62, A5, A1 J612, A1 J501, A41, A1	1 2 1 1
CNM1.7 x 3	“	A35, A1 H100, A1 C101, A1	1 1 1
CNM 1.7 x 4	“	B1, A1	2
CNM 2 x 9	“	H100, A1	1

Small screws:

Description	Surface treatment	Position of use	Quantity
CSS 1.4 x 3	Black nickel	A143, A125	3
CSS 1.7 x 2	“	B11, B1	2
CSS 1.7 x 2.2	Nickel	A401, A1	3
		A301, A1	2
	Blacknickel	B103, B1	2
		A508, A1	2
CSS 1.7 x 2.5	“	B9, B1	2
		E201, A1	2
		E201, C7	1
CSS 1.7 x 2.8	“	A202, A1	4
CSS 1.7 x 3	“	A2, A3, A4, A1	2
		A302, A301	2
		C26, C101	1
		E40, A1	2
CSS 1.7 x 6.5	“	A302, A301	2
CNM 1.7 x 3.5	“	A11, A1	2
T-CSM 1.4 x 3.5	Nickel	C304, C301	1
CNL-B 1.4 x 1.5	Black nickel	B107, B1	2
		M53, B51	2
CNL-B 1.4 x 2	“	M85, E209	1
		C241, C206	1
Small screws:			
CNL-D 1.4 x 1.6	“	E135, C6	1
		A515, A504	1
		C134, C101	1
CNL-D 1.4 x 2	“	C142, C101	1
		A504, A501	2
CNL-D 1.4 x 2.5	“	A502, A501	1
	“	J501, M75	1
CNL-D 1.4 x 3	“	B15, B20	1
		B46, B45	1
		B79, B74	1
CNL-D 1.7 x 2		B83, B1	1
CNL-D 1.7 x 2.5		M12, B1	1
	“	M13, B1	1
CNL-D 1.7 x 3	“	J521, A1	2
CNL-D 1.7 x 4	“	J403, J401, A101	2
CNL-E 1.7 x 2.5	“	C249, C210	1
CNL-E 1.7 x 3.5		A127, A123	1

Small screws:

Description	Surface treatment	Position of use	Quantity
CNL-F 1.7 x 1.8	Black nickel	C264, C205	1
CNL-F 1.7 x4		J201,B1	2
CRSS 1.4 x 1.6	“ (PB-5)	E229, E230	3

Washers:

Description	Material	Thickess	Position of use	Quantity
W1	Brass	0.07, 0.1mm	M57, M60	1
		0.3, 0.4	E153, A1	1
W2		0.1, 0.15	B83, B85	1
W3	“	0.3	A135, A101	2
	Steel	0.3	E145, A1	1
	Brass	0.15, 0.2, 0.25, 0.3	AS, M62	2
		0.2	J501, A41	1
W6	Stainless	0.03, 0.05, 0.07,		
		0.01, 0.15, 0.2	C136, C105,	1
			C126, C128	1
			C134, C101	1
			E111, C4	1
			A143, A144	1
			E402, E401	1
		0.1	M62, M63	1
W7	Brass	0.05, 0.1, 0.15, 0.2	A101, A1	1
W14	“	0.03, 0.05, 0.1	M62, M63	1
		0.1, 0.15	B41, B39	1
W16		0.3	C202, C216	1
W22	“	0.2, 0.3, 0.4	C204, C227	1
		0.1, 0.15, 0.2, 0.3	C141, C112	1
W24	“	0.1, 0.15, 0.2	C270, C218	1
W28	“	0.3	C229	1
W40	“	0.1, 0.15	B74, B75	1
W62	“	0.1, 0.15, 0.2	B103, B1	1
		0.1	M73, M74	1
W63	“	0.05, 0.1	B22, B30	1
W70	“	0.02, 0.03, 0.05		
		0.1, 0.15, 0.2	C254, C201	2
		0.3	E401	1
W73	“	0.5, 0.6	C20	1
W77	“	0.05, 0.07, 0.1	E201, E232	1